



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 09/965,526 | 09/26/2001 | Steve Goddard | UNL3058.2 | 7439 |

28997 7590 11/08/2005

HARNESSE, DICKEY, & PIERCE, P.L.C
7700 BONHOMME, STE 400
ST. LOUIS, MO 63105

EXAMINER

LUU, LE HIEN

ART UNIT PAPER NUMBER

2141

DATE MAILED: 11/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/965,526

Applicant(s)

GODDARD, STEVE

Examiner

Le H. Luu

Art Unit

2141

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08/26/05 - 09/22/05.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 September 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>08/26/05</u> | 6) <input type="checkbox"/> Other: _____ |

Art Unit: 2141

1. Claims 1-28 are presented for examination.
2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-28 are rejected under 35 U.S.C. § 103 (a) as being unpatentable over Van Watermulen et al. (Van Watermulen) patent no. 6,604,046, in view of Amicangioli patent no. 6,535,509.

4. As to claim 1, Van Watermulen teaches the invention substantially as claimed (figure 1), including a server for providing data to clients, the server comprising:

an OSI layer 4 dispatcher having a queue for storing connection requests received from clients (col. 4 line 61 - col. 5 line 8); and

at least one back-end server (col. 5 lines 28-42);

wherein the dispatcher stores in the queue one or more of the connection requests received from clients when the back-end server is unavailable to process said one or more connection requests (col. 4 line 61 - col. 5 line 42; col. 9 line 34 – col. 10 line 14);

wherein the dispatcher retrieves said one or more connection requests from the queue for forwarding to the back-end server when the back-end server becomes

available to process said one or more connection requests (col. 4 line 59 - col. 5 line 42); and

wherein the dispatcher determines whether the back-end server is available to process said one or more connection requests by comparing a number of connections concurrently supported by the back-end server to a maximum number of concurrent connections that the back-end server is permitted to support (col. 4 line 59 - col. 5 line 42).

However, Van Watermulen does not explicitly teach the maximum number of concurrent connections being less than a maximum number of connections which the back-end server is capable of supporting concurrently.

Amicangioli teaches the number of serviceable connections is less than the number of offered connections by a server (col. 14 lines 48 – col. 16 line 36).

It would have been obvious to one of ordinary skill in the Data Processing art at the time of the invention to combine the teachings of Van Watermulen and Amicangioli to set the maximum number of concurrent connections being less than a maximum number of connections which the back-end server is capable of supporting concurrently because it would provide an optimum connection load for the back-end server.

5. As to claim 2, Amicangioli teaches wherein the dispatcher is configured to monitor a performance of the back-end server, to define the maximum number of concurrent connections that the back-end server is permitted to support, and to dynamically adjust the maximum number in response to the monitored performance (col. 14 lines 48 – col. 16 line 36).

6. As to claim 3, Van Watermulen teaches the server is a cluster-based server comprising a plurality of back-end servers, wherein the dispatcher is configured to store in the queue said one or more connection requests when none of the back-end servers is available to process said one or more connection requests, and wherein the dispatcher is further configured to retrieve said one or more connection requests from the queue for forwarding to one of the back-end servers when said one of the back-end servers becomes available to process said one or more connection requests (figure 1; col. 4 line 61 - col. 5 line 42).

7. As to claims 4-6, Van Watermulen teaches the server is a Web server; the dispatcher and the back-end server are embodied in COTS hardware; the dispatcher comprises a first computer device, wherein the back-end server comprises a second computer device, and wherein the first and second computer devices are configured to communicate with one another over a computer network (figure 1).

8. Claims 7-28 have similar limitations as claims 1-6; therefore, they are rejected under the same rationale.

9. In the remarks, applicant argued in substance that

(A) Prior art does not teach a dispatcher having a queue for storing connection requests when a back-end server is unavailable, and for retrieving one or

Art Unit: 2141

more connection requests from the queue when the back-end server becomes available.

As to point (A), Van Watermulen teaches a service dispatcher 142 having FIFO-based connection pool 132.1 (queue) for storing requests when appropriate service manager for one of service pools 143-149 (back-end server) is unavailable, and for retrieving one or more connection request from the FIFO-based connection pool when the appropriate service manager for one of service pools becomes available (col. 4 line 49 – col. 5 line 42; col. 9 line 34 – col. 10 line 14).

(B) Prior art does not teach storing connection requests until an established connection is terminated.

As to point (B), Van Watermulen and Amicangioli teach storing connection requests, and closing established connections when they are terminated or inactive as specified in property file 140.1 (Van Watermulen, col. 5 lines 9-27; Amicangioli, col. 1 lines 30-50).

(C) Prior art does not teach defining a maximum number of concurrent connections that a server is permitted to support; monitoring the server's performance; and dynamically adjusting the maximum number in response to the monitoring to thereby adjust the server's performance.

As to point (C), Amicangioli teaches a maximum number of serviceable connections (maximum number of concurrent connections) that a server is permitted to support; monitor the server's connection load (server's performance); and dynamically

Art Unit: 2141

adjusting the maximum serviceable connections in response to the monitoring to optimize the server's performance (col. 14 line 48 – col. 16 line 36).

10. Applicant's arguments filed on 09/22/2005 have been fully considered but they are not deemed to be persuasive.

11. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 C.F.R. § 1.136(a).

A SHORTENED STATUTORY PERIOD FOR RESPONSE TO THIS FINAL ACTION IS SET TO EXPIRE THREE MONTHS FROM THE DATE OF THIS ACTION. IN THE EVENT A FIRST RESPONSE IS FILED WITHIN TWO MONTHS OF THE MAILING DATE OF THIS FINAL ACTION AND THE ADVISORY ACTION IS NOT MAILED UNTIL AFTER THE END OF THE THREE-MONTH SHORTENED STATUTORY PERIOD, THEN THE SHORTENED STATUTORY PERIOD WILL EXPIRE ON THE DATE THE ADVISORY ACTION IS MAILED, AND ANY EXTENSION FEE PURSUANT TO 37 C.F.R. § 1.136(a) WILL BE CALCULATED FROM THE MAILING DATE OF THE ADVISORY ACTION. IN NO EVENT WILL THE STATUTORY PERIOD FOR RESPONSE EXPIRE LATER THAN SIX MONTHS FROM THE DATE OF THIS FINAL ACTION.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Le H. Luu whose telephone number is 571-272-3884.

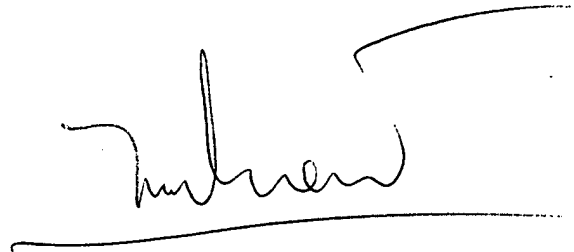
The examiner can normally be reached on 7:00am - 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rupal Dharia can be reached on 571-272-3880. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR.

Art Unit: 2141

Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read 'Le Hien Luu', is written over a horizontal line. The signature is stylized with a large initial 'L' and a long horizontal stroke.

LE HIEN LUU
PRIMARY EXAMINER